

Application No. 10/037036
Page 2

Amendment
Attorney Docket No. S63.2B-9919-US01

Amendments To The Claims:

1. (Previously Presented) A process for forming a stent of a polymer material, the process comprising the steps of:
 - a) forming a generally tubular stent of said polymer material;
 - b) radially expanding the stent to produce an expanded diameter stent; and then,
 - c) annealing the expanded diameter stent to shrink its diameter to a reduced diameter.
2. (Original) A process as in claim 1 further comprising at least one time repeating steps b) and c) in sequence.
3. (Original) A process as in claim 1 wherein in step a) the stent is formed by molding the polymer material.
4. (Original) A process as in claim 3 wherein the polymer material is thermoplastic.
5. (Original) A process as in claim 4 wherein the polymer material is biodegradable.
6. (Original) A process as in claim 1 wherein the polymer material is selected from the group consisting of poly(alpha-hydroxy acid), polylactic acid-polyethylene oxide copolymers; modified cellulose; collagen or other connective proteins; adhesive proteins; hyaluronic acid; polyanhydrides; polyphosphoesters; poly(amino acids); copolymers thereof; and mixtures of any of said materials.
7. (Original) A process as in claim 6 wherein the polymer material is a poly(alpha-hydroxy acid) selected from the group consisting of homopolymers and copolymers of polylactide (PLA), poly-L-lactide (PLLA), poly-D-lactide (PDLA), polyglycolide (PGA), polydioxanone, polycaprolactone, poly(hydroxybutyrate), polygluconate, and mixtures thereof.

Application No. 10/037036
Page 3

Amendment
Attorney Docket No. S63.2B-9919-US01

8. (Original) A process as in claim 1 wherein the step b) is performed at a temperature below the glass transition temperature of the polymer material.

9. (Original) A process as in claim 8 wherein the step b) is performed at room temperature.

10. (Original) A process as in claim 1 wherein the step c) is performed at a temperature above the glass transition temperature of the polymer material.

11. (Original) A process as in claim 10 wherein the step c) is performed at a temperature within the range of about 90°C to about 150°C.

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Original) A process for forming a tubular article of a polymeric material, the process comprising the steps of:

- a) forming a generally tubular article of said polymeric material;
- b) radially expanding the article to produce an expanded diameter article; and then,
- c) annealing the expanded diameter article to shrink its diameter to a reduced diameter.

and wherein at least one time steps b) and c) are repeated in sequence.

16. (Original) A medical device adapted for body lumen navigation and/or treatment produced by the process of claim 15.

17. (Original) A process for forming a tubular article of a polymeric material, the process

Application No. 10/037036
Page 4

Amendment
Attorney Docket No. S63.2B-9919-US01

comprising the steps of:

- a) forming a generally tubular article of said polymeric material;
- b) radially expanding the article to produce an expanded diameter article; and then,
- c) annealing the expanded diameter article to shrink its diameter to a reduced diameter

and wherein the polymer material is a biodegradable polymer.

18. (Original) A process as in claim 17 wherein at least one time steps b) and c) are repeated in sequence.

19. (Original) A process as in claim 17 wherein the polymer material is selected from the group consisting of poly(alpha-hydroxy acid), polylactic acid-polyethylene oxide copolymers; modified cellulose; collagen or other connective proteins; adhesive proteins; hyaluronic acid; polyanhydrides; polyphosphoesters; poly(amino acids); copolymers thereof; and mixtures of any of said materials.

20. (Original) A medical device adapted for body lumen navigation and/or treatment produced by the process of claim 17.

21. (Original) A process for forming a stent of a polymeric material, the process comprising the steps of:

- a) forming a tube of said polymeric material;
- b) radially expanding the tube to produce an expanded diameter tube;
- c) annealing the expanded diameter tube to shrink its diameter to a reduced diameter;
and subsequently
- d) forming a stent from the annealed tube.

22. (Original) A process as in claim 21 wherein the steps b) and c) are repeated at least once before step d) is performed.

23. (Original) A process as in claim 21 wherein in step d) the stent is formed by

Application No. 10/037036
Page 5

Amendment
Attorney Docket No. S63.2B-9919-US01

machining or etching the reduced diameter tube obtained from step c).

24. (New) A process as in claim 1 wherein in step a) a pattern of perforations is provided in the tube wall.

25. (New) A process as in claim 1 wherein the steps a) - c) are all performed prior to deployment of the stent in a body.